Outcome of Modified Carotid Endarterectomy Technique in Symptomatic and Asymptomatic Carotid Artery Stenosis Patients

A. Elmallah, G. McGreal

Mercy University Hospital, Cork, Ireland

Background: Carotid endarterectomy (CEA) has been used since described by Carea in 1956 to treat symptomatic Carotid artery stenosis (CAS) patients with proven efficacy and safety. CEA for asymptomatic patients remains a debate.
Objectives: To evaluate the outcome of modified CEA technique in both symptomatic and asymptomatic patients with significant carotid stenosis.
Methods: Retrospective study was held at Mercy University Hospital. Two hundreds and eighty patients were admitted between 2005 to 2010 for CEA; 132 patients were asymptomatic and 148 patients were symptomatic. Preoperative patients' characteristics & indication of surgery were analysed. Operative details were recorded including selective shunting & patching with modified shorter arteriotomy technique. Immediate, early and late post-operative complications, ICU and hospital stay and death rates were assessed.
Results: Postoperative transient ischemic attacks (TIA) rate was 2.5% in all patients. Thirty days postoperative strokes were recorded only in symptomatic group (2.14%). Total TIAs and strokes in 30 days postoperative were significantly associated with symptomatic group comparing to asymptomatic one (P = *0.02). ICU and post-operative hospital stay was longer in symptomatic group. All patients post-operative blood transfusion rate was 1.78%. It was statistically associated with symptomatic group (P = *0.04). Other postoperative complications were analysed in both groups with no statistical difference. Mortality rate was (1.4%). It was only registered in symptomatic group.
Conclusion: CEA in asymptomatic CAS patient group is safe & effective. It should be done in high volume centres. Modification of endarterectomy technique with selective shunting and patching shorten the surgery time without compromising safety or outcome.

Operative Explantation of Inferior Vena Cava Filters

M.E. O'Donnell [1,2], C. Velazco [2], R. Day [2], W.M. Stone [2], R.J. Fowl [2], T.C. Bower [3], P. Gloviczki [3], S.R. Money [2]

[1] *Department of Vascular and Endovascular Surgery, Royal Victoria Hospital, Belfast, Northern Ireland*
[2] *Division of Vascular and Endovascular Surgery, Mayo Clinic, 5777 East Mayo Boulevard, Phoenix, AZ 85054, United States*
[3] *Division of Vascular and Endovascular Surgery, Mayo Clinic, 200 First St. SW, Rochester, MN 55905, United States*

Objectives: Inferior vena cava (IVC) filter placement is not without risk. It has been associated with puncture site bleeding, venous thrombosis, filter migration and perforation. The objective of this study was to assess our experience with open operative explantation of IVC filters.
Methods: After IRB approval, patients were identified from case logs that had transabdominal IVC filter removal between 1994 and 2013. Patient demographics, thromboembolic risk profile, clinical history, operative indication and outcomes were recorded for each case.
Results: Eighteen patients (male = 9, mean age = 49.6 years) were identified. IVC filters (permanent = 4, retrievable = 8, unknown = 6) were deployed for a combination of significant thromboembolic events (n = 16), post-trauma (n = 3) or after failure of anticoagulation therapy (n = 2). Ten patients had retrievable filters that were not removed percutaneously due to pericaval filter strut perforation. Seven patients subsequently presented with abdominal/back pain, haematuria or sepsis. Midline laparotomy was utilized for explantation in eleven patients during oncological resections. A subcostal incision (n = 5) was used for planned explantation alone. One patient had robotic-assisted laparoscopic removal and another had an open transjugular removal. Caval venotomy was primarily closed (n = 15) or patched with bovine pericardium (n = 2). No complications attributed to filter removal were identified in the post-operative period. One patient died from advanced malignancy. The other seventeen patients remain well (mean follow-up 618 days).
Conclusions: Filter strut caval perforation remains the most significant indication for transabdominal removal while removal is often considered incidentally during oncological resection. Although operative explantation still remains infrequent, our series suggests that it may be performed safely without significant post-operative complications.

Fenestrated/Branched Endovascular Aneurysm Repair: The Northern Ireland Experience

D.W. Harkin, D. Dunlop

Department of Vascular and Endovascular Surgery, Royal Victoria Hospital, Belfast, Northern Ireland

Complex Endovascular Aneurysm Repair allows treatment of large abdominal aortic aneurysm (AAA), unsuitable for standard infra-renal repair (EVAR). This series reports the midterm results of a single tertiary-referral centre covering Northern Ireland.
Methods: We interrogated our local prospective vascular registry for patients who had undergone Fenestrated (Fen-EVAR) or Branched (b-EVAR) repair. Patient records were retrospectively interrogated for outcomes including mortality, morbidity, target-vessel patency, renal function, endoleak and re-intervention.
Results: Between 2006—2015, complex endografts were used in 11 patients. These included 9 Fen-EVAR for treatment of infra-renal AAA and 2 b-EVAR for treatment of Crawford-Type-2 Thoraco-abdominal aortic aneurysms. 28 target-vessels were stented from 24 Fenestrations and 4 branches. All were custom Cook-Zenith endografts. Mean age was 72(68-79 years) and mean maximal aneurysmal diameter of 66mm (55-78mm), all patients were ASA-3. 30-day mortality was 0. Primary endovascular success was 100%, all target vessels stented and patent. We had 1/11 endoleak (Type-2) managed conservatively, and no Type-1/